

CLAIMS

1. A wheelchair comprising a seat, a pair of rear wheels fixed to axle shafts arranged below the seat and arranged outside both sides of the seat, a grasping portion arranged rearwardly of the seat to be grasped and operated by a helper, at least one front wheel arranged forwardly of the axle shafts, actuation plates provided in juxtaposition with the seat to descend when a user sits on the seat to lower the seat with the weight and to ascend when the user rises from the seat to permit the seat to return with removal of the weight, brake means mounted on the axle shafts to brake the axle shafts and energized constantly in a non-braking direction, and levers coupled directly or indirectly to the brake means to move according to descending motions of the actuation plates to act on the brake means to put the brake means in a non-braking state and to move according to ascending motions of the actuation plates to act on the brake means to put the brake means in a braking state, and wherein when the user sits on the seat, the user's body weight causes the seat to descend and the actuation plates to move downward and positional movements of the actuation plates cause the levers to move to release braking on the axle shafts by the brake means, and when the user having sat on the seat rises, the actuation plates having been pushed down by the user's body weight move upward and positional movements of the

actuation plates cause the levers to move to permit the brake means to brake the axle shafts.

2. The wheelchair according to claim 1, wherein the actuation plates are arranged on a back surface of the seat.

3. The wheelchair according to claim 2, further comprising first bias means provided on the actuation plates and wherein the actuation plates are constantly biased upward by the first bias means.

4. The wheelchair according to claim 3, wherein the levers are connected to the actuation plates through lengths of wire and the levers are pulled by the lengths of wire with upward movements of the actuation plates to swing upward and swing downward with downward movements of the actuation plates.

5. The wheelchair according to claim 4, wherein the levers extend forward relative to positions of the axle shafts of the rear wheels.

6. The wheelchair according to claim 5, wherein the brake actuation plates are provided to contact with an underside of a rear portion amounting to about 1/4 of the seat.

7. A wheelchair comprising a seat, a pair of rear wheels fixed to axle shafts arranged below the seat and arranged outside both sides of the seat, a grasping portion arranged rearwardly of the seat to be grasped and operated by a helper, at least one front wheel arranged forwardly of the axle shafts, legs extended forward and downward from the seat, steps mounted

on the legs,

actuation plates provided in juxtaposition with the seat to descend when a user sits on the seat to lower the seat with the weight and to ascend when the user rises from the seat to permit the seat to return with removal of the weight,

brake means mounted on the axle shafts to brake the axle shafts and energized constantly in a non-braking direction,

levers coupled directly or indirectly to the brake means to move according to descending motions of the actuation plates to act on the brake means to put the brake means in a non-braking state and to move according to ascending motions of the actuation plates to act on the brake means to put the brake means in a braking state,

the legs being turnably supported horizontally in base positions and biased in one directions of turning by second bias means,

and position holding means for holding the legs in positions, in which the steps are used, against the bias of the second bias means and released from a holding state as the actuation plates move upward, and wherein when the user sits on the seat, the user's body weight causes the seat to descend and the actuation plates to move downward and positional movements of the actuation plates cause the levers to move to release braking on the axle shafts by the brake means, and when the user having sat on the seat rises, the actuation plates having been pushed

down by the user's body weight move upward and positional movements of the actuation plates cause the levers to move to permit the brake means to brake the axle shafts and the holding state by the position holding means is released to cause the bias of the second bias means to evacuate the legs.

8. The wheelchair according to claim 7, wherein the actuation plates are arranged on a back surface of the seat.

9. The wheelchair according to claim 8, further comprising first bias means provided on the actuation plates and wherein the actuation plates are constantly biased upward by the first bias means.

10. The wheelchair according to claim 9, wherein the levers are connected to the actuation plates through lengths of wire and the levers are pulled by the lengths of wire with upward movements of the actuation plates to swing upward and swing downward with downward movements of the actuation plates.

11. The wheelchair according to claim 10, wherein the levers extend forward relative to positions of the axle shafts of the rear wheels.

12. The wheelchair according to claim 11, wherein drive is transmitted through lengths of wire to the position holding means from the actuation plates.

13. The wheelchair according to claim 12, wherein the legs are arranged left and right on both sides and open outward or inward.

14. The wheelchair according to claim 13, wherein the brake actuation plates are provided to contact with an underside of a rear portion amounting to about 1/4 of the seat.

15. A wheelchair comprising a seat, a pair of rear wheels fixed to axle shafts arranged below the seat and arranged outside both sides of the seat, a grasping portion arranged rearwardly of the seat to be grasped and operated by a helper, at least one front wheel arranged forwardly of the axle shafts, legs extended forward and downward from the seat, steps mounted on the legs,

actuation plates provided in juxtaposition with the seat to descend when a user sits on the seat to lower the seat with the weight and to ascend when the user rises from the seat to permit the seat to return with removal of the weight,

brake means mounted on the axle shafts to brake the axle shafts and energized constantly in a non-braking direction,

levers coupled directly or indirectly to the brake means to move according to descending motions of the actuation plates to act on the brake means to put the brake means in a non-braking state and to move according to ascending motions of the actuation plates to act on the brake means to put the brake means in a braking state,

the steps being turnably supported in base positions and biased in one directions of turning by third bias means,

and position holding means for holding the steps in positions,

in which the steps are used, against the bias of the third bias means and released from a holding state as the actuation plates move upward, and wherein when the user sits on the seat, the user's body weight causes the seat to descend and the actuation plates to move downward against the first bias means and positional movements of the actuation plates cause the levers to move to release braking on the axle shafts by the brake means, and when the user having sat on the seat rises, the actuation plates having been pushed down by the user's body weight move upward by the first bias means and positional movements of the actuation plates cause the levers to move to permit the brake means to brake the axle shafts and the holding state by the position holding means is released to cause the bias of the third bias means to evacuate the steps.

16. The wheelchair according to claim 15, wherein the actuation plates are arranged on a back surface of the seat.

17. The wheelchair according to claim 16, further comprising first bias means provided on the actuation plates and wherein the actuation plates are constantly biased upward by the first bias means.

18. The wheelchair according to claim 17, wherein the levers are connected to the actuation plates through lengths of wire and the levers are pulled by the lengths of wire with upward movements of the actuation plates to swing upward and swing downward with downward movements of the actuation plates.

19. The wheelchair according to claim 18, wherein drive is transmitted through lengths of wire to the position holding means from the actuation plates.

20. The wheelchair according to claim 19, wherein the brake actuation plates are provided to contact with an underside of a rear portion amounting to about 1/4 of the seat.

21. The wheelchair according to claim 20, wherein when the holding state by the position holding means is released, the steps turn from a horizontal state to evacuate to a standing state.